COMPUTING Enquiry Questions and Assessment Checkpoints

Y1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question(Composite Outcome)	**What is online safety?**	**Can I use 2code to create a simple program?**	**What is a spreadsheet?**	**What are pictograms and how can they be used to represent data?**	**How can I use 2create to make an interactive story?**	*How can I create an interactive story using 2create?*
Lesson enquiry questions.	1. 'How do we login safely?' 2. 'How we do we access our work areas in the Purple Mash programme?' 3. 'How do we use topic templates in the pragramme?' 4. 'How do I save, print, open and create new documents in the programme?'	1. Can I give and follow instructions? 2. Can I use 2code to make a computer program? 3. Can I use an event to control an object? 4. Can I create a simple program using code blocks? 5. Can I understand what backgrounds and objects are? 6. Can I plan and make a computer program.	1.What does a spreadsheet look like? 2.Can you add clipart images to a spreadsheet? 3.Can you use the speak and count tool?	1. Can I understand that data can be presented in picture format? 2. Can I contribute to a class pictogram? 3. Can I use a pictogram to record the results of an experiment?	1. Can I understand the difference between traditional books and ebooks? 2. Can I add animation to a picture? 3. Can I add sound effects to a picture? 4. Can I add a background to the story? 5. Can I use the copy and paste feature to create additional pages.	1. Can I understand that computer programs work by following instructions called code? 2. Can I understand what objects and actions are within a programme? 3. Can I understand what an event is within a programme? 4. Can I understand how code executes when a program is run? 5. Can I understand how to use the scale attribute (property). 6. Can I plan and make a computer programme?

Assessment Checkpoint	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:
	✓ Know what it means to 'log in' and why this is personal information. ✓ Use a safe and secure programme to access work. ✓ Become more confident in the use of the programme and different icons. ✓ Learn to safely ensure work is saved and create new pieces of work online.	✓ Arrange code blocks to create a set of instructions. ✓ Create a program using code blocks. ✓ Create a simple program using code blocks. ✓ Notice when a code executes when a program is run. ✓ Edit a scene by adding, deleting and moving objects. ✓ Use code to make the program they have designed work.	✓ Understand what a spreadsheet looks like ✓ Navigate a spreadsheet. ✓ Move cell and lock tools. ✓ Add an image to a spreadsheet. ✓ To use speak and count tools.	✓ Discuss and illustrate the transport used to travel to school. ✓ Work collaboratively and create a class pictogram and discuss what the pictogram shows. ✓ Collect data from rolling a dice 20 times and record the results.	✓ Explore the tools of 2Create a Story's 'My Simple' Story level. ✓ Be able to play the pages created so far and save them. ✓ Add a voice recording and/or created music to a picture. ✓ Be able to use the additional tools to add more features to their story. ✓ Continue and complete an animated story.	✓ Arrange code blocks to create a set of instructions. ✓ Be able to use object and action code blocks. ✓ Use event, object and action code blocks. ✓ Notice when their code executes when their program is run. ✓ Change the size of objects using the attributes (properties) table. ✓ Use code to make the program they have designed work.

Y2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question (Composite Outcome)	*Do I know how to search, share work and be safe online?*	Can I solve problems through coding?	How can we use spreadsheets to collect and show data?	Can I use ICT to create questions and record data?	Can I use 2paint to create art?	*Can I use 2Sequence to explore harmony and build up musical scores?*
Lesson enquiry questions.	1. Can I search online using the search tool? 2. Can I use digital technology to share my work on Purple Mash to communicate and connect with others? 3. Do I know how to share more globally on the Internet? 4. Can I open and send simple online communications in the form of email? 5. Do I know that information put online leaves a digital footprint or trail?	1. Can I explain that for the computer to make something happen, it needs to follow clear instructions?' 2. Can I plan an algorithm that includes collision detection? 3. Can I create a program that uses a timer-after command? 4. Can I create a computer program that includes different objects types and to make objects move? 6. Can I can use a design document to start debugging a program?	1. Can I explain what rows and columns are in a spreadsheet? 2. Can I use copying, cutting and pasting to help make spreadsheets? 3. Can I use images in a spreadsheet? 4. Can I create a table of data on a spreadsheet?	1. Can I use and create pictograms? 2. Can I create Yes / No questions? 3. Do I know what is meant by Binary Tree? 4. Can I use 2Question to find out answers to more complicated questions? 5. What is meant by a database?	1. Can I create art based upon impressionist art? 2. Can I create art based upon pointillism? 3. Can I describe the main features of Piet Mondrian's work? 4. Can I create art by repeating patterns in a variety of ways? 5. Can I create surrealist art using drawing and clipart?	1. Can I make music digitally? 2. Can I explore, edit and combine sounds? 3. Can I add sounds to a tune to improve it? 4. How can I create music to express feelings? 5. Can I record my own sound and upload it into the Sounds section?

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	✓ Use the search facility to refine searches on Purple Mash. ✓ Save work into our Year 2 folder. ✓ Show how things can be shared electronically for others to see. ✓ Reply to an email and send. ✓ Give examples of things that they would not want to be in their digital footprint.	✓ Create a simple code to move an object. ✓ Read blocks of code and predict what will happen. ✓ Create a program that uses a timer-after command. ✓ Program to make objects move. ✓ Design a document to start debugging a program.	✓ Add images from an image toolbox and allocate them a value. ✓ Use a spreadsheet to solve a mathematical puzzle. ✓ Understand how much I need to pay using coins by using a spreadsheet to help calculate. ✓ Usee the data to create a block graph manually.	✓ Understand that the information on pictograms cannot be used to answer more complicated questions. ✓ Use a range of yes/no questions to separate different items. ✓ Designed a binary tree to sort pictures of children. ✓ Understand that questions are limited to 'yes' and 'no' in a binary tree. ✓ Use a database to answer simple and more complex search questions.	✓ Use 2Paint a Picture to create art based upon this style. ✓ Use 2Paint a Picture to create art based upon this style. ✓ Use 2Paint a Picture to create art based upon this style. ✓ Combine more than one effect in 2Paint a Picture to enhance patterns. ✓ Use eCollage function in 2Paint a Picture to create surrealist art using drawing and clipart.	✓ Use different sounds within 2Sequence to create a tune. ✓ Explore how to speed up and slow down, and to move tunes. ✓ Add sounds to a tune they have already created to change it. ✓ Create two tunes which depict two feelings. ✓ Create, uploaded and use their own recorded sound.

Y3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question (Composite Outcome)	**How can we stay safe online and why is it so important that we do?**	**What can you create using coding?**	**Can I improve my touch typing ability and speed?**	**Can I send and receive emails safely?**	**What is a simulation?**	**What is a branching database?**
Lesson enquiry questions.	1. Why are passwords important and how can we make sure our passwords are keeping us safe? 2. Can we identify ways in which websites may not always be reliable and how we can check information? 3. 3. How can we ensure the information we find online in reliable? 4. What is cyber bullying and what strategies can be used to deal with online bullying?	1. How are flowcharts used in computer programming? 2. How can timers be used in computer programming? 3. How can repeat commands be used in computer programming? 4. What does it mean to code, test and debug? 5. Can you design and create an interactive scene?	1. How can we use the home, top and bottom row keys when typing? 2. Can I use two hands when typing with home, bottom and top row keys? 3. Can I efficiently type with my left hand? 4. Can I efficiently type with my right hand? 5. How has my typing speed and efficiently improved?	1. What are the different methods of communication? 2. Can I open and respond to an email? 3. How can I use email safely? 4. How do can I add an attachment to an email? 5. 5. Can I send and receive emails in a conversation thread?	1. What are the purpose of simulations? 2. Can I use a simulation, commenting on my choices and the effect they have? 3. Can I complete and evaluate a more complex simulation?	1. What Is a branching database? 2. Can you copy a branching database on a computer? 3. Can you create your own branching database? 4. Can you include images in your branching database?

Assessment Checkpoint	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:	Children who are **secure** will be able to:
	✓ Understand and record why passwords are important. ✓ Research and create a spoof website. Understand that not all information is reliable on the internet. ✓ Know what cyberbullying is and how to deal with it.	✓ Use a flowchart to create a computer programme using clickers and timers. ✓ Create a programme that uses timer-every and timer-after commands. ✓ Use repeat commands to move an object. ✓ Create programme using prior knowledge, run test and debug their programme. ✓ Plan, code and create a programme with several different things happening.	✓ Use home, top and bottom row keys. ✓ Write a short email. ✓ Able to type left hand, specific fingers for specific letters. ✓ Able to type with right hand, specific fingers for specific letters. ✓ Type using home, top and bottom row keys .	✓ State strengths and weaknesses of different communication methods. ✓ Send email to include CC and BC. ✓ Write rules and create a quiz for staying safe online. ✓ Send and receive an email with attachment Simulated email scenario.	✓ Know: what simulations represent, what they are used for and what are the pros and cons. ✓ Use a simulation to check predictions. ✓ To complete and evaluate different scenarios.	✓ Able to sort objects using 'yes or 'no questions. ✓ Create a branching database. Create a branching database for a suitable theme ✓ Find, save and insert appropriate images into their databases

Y4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question (Composite Outcome)	How do we keep safe online?	What is a computer program?	*What is meant by 'writing for different audiences'?*	What is 2logo?	What is meant by effective searching?	How can we make music using computers?
Lesson enquiry questions.	1. What is meant by 'Going Phishing'? 2. Why do we have to be aware of Malware ? 3. What is Plagiarism ? 4. What do we mean by 'Healthy Screen-Time'? 5. Write a whole class e-safety charter for class display	1. What is design, code , test and debug? 2. What are IF statements? 3. What are co ordinates? 4. What are number variables?	1. What is a 'font'? 2. What is a 'simulated scenario'? 3. What is a 'community campaign'?	1. How can I write a set of instructions whilst using the programme '2Logo'? 2. How can I use letters whilst using '2Logo'? 3. What is meant by a 'procedure 'using '2Logo'?	1. What is a search engine? 2. How can we search Effectively to Answer Questions ? 3. What is meant by a reliable sources?	1. What is meant by 'making music' in IT? 2. What is meant by rhythm and tempo? 3. What is a melodic phrase? 4. How can we compose a piece of electronic music?

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	✓ Use 2Respond creator tool (within 2Email) to open 2Respond Activity SPAM (use the search to find it) Use the 2Respond activity to give some information about what installing something could do to a device. ✓ Complete writing template about Tim Berners Lee. ✓ Understand their is a choice of how to use free time safely. ✓ Write a e-safety charter for class display.	✓ Create a simple computer program using Gibbon. ✓ Discuss what an 'IF' statement is. Code using Gibbon. ✓ Understand co-ordinates which determine positions of a point, shape or object in a particular space. ✓ Include variables which are used in programming to keep track of things whilst the game is running.	✓ Investigate the various styles of font and use these to have an impact as a tale within a newspaper. ✓ Produce a newspaper report using a variety of scenarios. ✓ Use '2Connect' to mindmap a community campaign.	✓ Follow instructions on how to create shapes using '2Logo' ✓ Understand the pu and pd commands as well as drawing patterns of increasing complexity. ✓ Use the 'procedure' feature within the ✓ programme to create initials in Logo.	✓ Structure search queries to locate specific information. ✓ Use different search engines to answer a series of questions. Write questions for a friend to solve. ✓ Analyse the contents of a web page for clues about the credibility of the information.	✓ Identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture. ✓ Explain what tempo is, and how changing it can change the mood of a piece of music. ✓ Create a melodic pattern using 2Sequence and Busy Beats . ✓ Explore and understand through Purple Mash how music is created.

Y5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question (Composite Outcome)	How can we stay safe online?	Can you code effectively?	Can you create a 3D game?	Can you create a spreadsheet?	Can you create a 3D model?	Can you use a concept map?
Lesson enquiry questions.	1. Do you know what information you can share online? 2. Should you share a picture of yourself online? 3. What makes a good password? 4. Have you ever plagiarized? 5. What forms of communication are reliable?	1. How can you code efficiently? 2. How do you simulate a physical system? 3. How do you use decomposition and abstraction? 4. What is friction and functions? 5. How do you use strings? 6. How do you use text variables and concatenation?	1. How do you use the 2DIY 3D tool and can you evaluate a computer game? 2. Can you design your own game? 3. Can you make a playable game?. 4. Can you finish and share you game? 5. Can you self and peer evaluate?	1. Can you use formulae within a spreadsheet to convert measurements of length and distance? 2. Can you use the count tool? 3. Can you use a spreadsheet to model a real-life problem? 4. Can you create a formulae that use text variables? 5. Can you use a spreadsheet to help plan a school cake sale ?	1. Can you use 2design? 2. Can you use moving points when designing a vehicle? 3. Can you design a 3d model fit for purpose? 4. Can you refine your model, print it and build it?	1. Do you understand the need for visual representation? 2. Can you use 2Connect? 3. How can a concept map be used to retell a story? 4. Can you work collaboratively on a concept map?

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	✓ Understand the SMART rules. ✓ *Understand what images are safe to post online.* ✓ *Understand what makes a good password..* ✓ Know what plagiarism is and how to reference others. ✓ Understand different ways to communicate how to do this safely and what to do if someone is unkind.	✓ *Able to code and play a game.* ✓ *Know how to plan and code an algorithm for a set of traffic lights.* ✓ *Tasks can be broken down in smaller tasks.* ✓ *Use functions in coding.* ✓ *Use strings in programming.* ✓ *Use strings to complete a range of tasks.*	✓ Play games, review them and plan a game with a consistent theme. ✓ Use snipping tool to upload images. ✓ Create characters and sounds to ensure game comes alive. ✓ Write formal instructions and share on a blog. ✓ Self and peer access editing glitches in games.	✓ Using a spreadsheet convert from kms to m and m to cms. ✓ Use a count tool. ✓ Using different formulas work out area and perimeter. ✓ Use a range of formula to workout amount of days and hours in a year. ✓ Use a variety of formula to workout different amounts of ingredients.	✓ Use different viewpoints in 2design. ✓ Adapt a vehicle by moving points to alter the shape. ✓ Ability to edit a polygon model to design a model fit for purpose. ✓ Design, refine, print and evaluate a 3d design.	✓ Use a concept map and use them to identify a concept. ✓ Use stage, nodes and connections when using a concept map. ✓ Use 2Connect Story Mode to create an informative text. ✓ Work collaboratively and present their concept map and idea to the class. ✓

Y6		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Lead Enquiry Question (Composite Outcome)		How can we stay safe online?	How can we use spreadsheets?	What is a blog?	What are text adventures?	What is quizzing?	1st question -What is a network? 2nd question - Can you code effectively?
Lesson enquiry questions.		1. How can we use a message in a game? 2. What is online behaviour? 3. Why is Screen time important?	1. What is probability? 2. How can we create a computational model? 3. How can I use a spreadsheet to plan pocket money spending? 4. Why is a spreadsheet helpful to plan a school event?	1. What is a blog? 2. Why do we have to plan a blog? 3. Can we write a blog entry? 4. How do you interact with other peoples blogs?	1. Can I plan a text adventure 2. How do I create a text adventure? 3. What is De-bugging a text adventure?	1. What is 2DIY? 2. How to use 2Quiz? 3. How to use 2Quiz? 4. What are grammar quizzes? 5. How does a database quiz work?	1. How do we use the world wide web and the internet? 2. What is a network and how do we access the internet? 3. Why will the internet be important in the future? 1. Can you make a complex program? 2. Can you use different functions? 3. Can you use control functions? 4. Can you code a text based adventure?

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	✓ Explore and create a game that highlights key areas of e-safety ✓ Understand a digital footprint and understand how this affects chances of getting a job. ✓ Understand why balancing screen time is important.	✓ Use the 2 calculate app to explore and understand probability with dice rolling. ✓ Calculate the prices of items using formula. ✓ Use 2 calculate and formulas to calculate how long it takes to save for various items. ✓ Use spreadsheet to maximize money ✓ donated to charity.	✓ Understand the key features of a blog. ✓ Use the 2create app to plan their blogs. ✓ Write a blog ✓ Interacting with other children's blogs and comment on peers.	✓ Use the 2connect app to plan a text adventure. ✓ Create a text adventure using the 2create app. ✓ Explore created games and check all story paths work accurately.	✓ Create a simple picture based quiz for young children ✓ Use the 2 quiz app and create an online quiz. ✓ Complete individual quizzes and share on a class blog for peers to play. ✓ Explore the grammar quiz options and create one. ✓ Become familiar with a pre-generated database and answer a quiz based off this.	✓ Create concept maps about different uses of the internet. ✓ Create a concept map of how our school connects to the internet. ✓ Research Tim Berner and create a fact file about him ✓ Children can plan a program which includes a timer and a score. ✓ Children can create a program that uses multiple functions with the code arranged in tabs. ✓ Children can code programs that take text input from the user and use this in the program. ✓ Children can follow through

						the code of how a text adventure can be programmed in 2Code.